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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/737,050
Filing Date: December 14, 2000
Appellant(s): TATE ET AL.

William M. Lee, Jr.
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 01/10/08 appealing from the Office action mailed 09/10/07.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,201,536	Hendricks et al.	03-2001
6,564,381	Hodge et al.	05-2003
5,357,276	Banker et al.	10-1994
6,304,578	Fluss	10-2001
5,701,582	DeBey	12-1997

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 3, 4, 7, 10, 13, 14, 18, 21, 22 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (Hendricks) (6,201,536) in view of Hodge et al. (Hodge) (6,564,381) and Banker et al. (Banker) (6,201,536).

As to claim 1, while Hendricks discloses a system for streaming data (Fig. 1) comprising: a **content providing server** (operations center, 202) capable of storing content and communicating the content (column 8, lines 8-54) to a plurality of client terminator units (set top terminals, 220) via a communications network (concatenated cable system, 210; column 7, lines 1-3 and column 8, line 65-column 9, line 3), and

a **distribution server** (Headend, 208) coupled in-line between the content providing server and the plurality of client terminator units (see Fig. 1),

wherein the distribution server is arranged to **generate** at least a plurality of onward data streams (staggered streams of a single program; column 34, lines 32-59) and **transmit** the plurality of onward data streams (column 34, lines 32-59) to the plurality of client terminator units, respectively (transmitted to the subscribers who will receive the program at that start time; column 34, lines 39-59), in response to control data received from the content providing server (column 8, lines 31-44) and in response to an incoming data stream received or being received from the content providing server and corresponding to the content (program package signals; column 8, lines 8-30 and 44-54),

wherein the plurality of onward data streams **correspond** substantially to the content (column 8, line 65-column 9, line 3 and column 34, lines 32-59) and the distribution server **offsets** in time each of the plurality of onward data streams with respect to a preceding one of said plurality of onward data streams (column 34, lines 31-39) by an offset value (wherein the start time of each channel is staggered so as to be offset from the preceding one; column 34, lines 32-46) indicated within the control data (schedule indicating staggered start times; column 8, lines 31-43 and column 34, lines 31-39 and lines 47-59), he fails to specifically disclose communicating content in response to requests for the content and wherein the data streams are offset by a single value.

In an analogous art, Hodge discloses a video distribution system (Fig. 2; column 3, lines 21-51) wherein a super hub controller (13) will determine when content is to be distributed in response to requests for the content (requests by motion picture studios as to how and when the content is to be distributed; column 4, line 64-column 5, line 11) for the typical benefit of ensuring maximum revenue distribution from broadcast video programs (column 3, lines 40-51).

Additionally, in an analogous art, Banker discloses a broadcast television system (Fig. 1) for providing NVOD services (column 2, lines 40-68) wherein a plurality of data streams consisting of the same program are transmitted continuously and sequentially (column 11, lines 23-42, Fig. 6A, 8 and 9) with each data stream offset with respect to a preceding one of said plurality of onward data streams by a single offset value (such as 15 minutes; see Fig. 6A, 8 and 9; column 11, lines 23-42) for the typical benefit of providing a clear and consistent indication of the wait required for a user to start viewing the movie (column 11, lines 23-42 and Fig. 6A).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hendrick's system to include communicating content in response to requests for the content, as taught by Hodge, for the typical benefit of ensuring maximum revenue distribution from broadcast video programs.

Additionally, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hendrick's and Hodge's system to include wherein the data streams are offset by a single value, as taught by Banker, for the

typical benefit of providing a clear and consistent indication of the wait required for a user to start viewing the movie.

As to claim 10, while Hendricks discloses a method of streaming data (Fig. 1) between a content providing server (operations center, 202) and a plurality of client terminator units (set top terminals, 220), the method comprising:

receiving at a **distribution server** (Headend, 208) control data (column 8, lines 31-44) and an incoming data stream corresponding to content (program package signals; column 8, lines 8-30 and 44-54), the incoming data stream being received from the content providing server (column 8, lines 8-30 and 44-54),

in response, generating a plurality of data streams (staggered streams of a single received program; column 34, lines 32-59), and

transmitting the at least the first and second onward data streams (column 34, lines 32-59) to the plurality of client terminator units, respectively (transmitted to the subscribers who will receive the program at that start time; column 34, lines 39-59), in response to the incoming data stream (in response to receiving the program from the operations center; column 8, lines 8-30 and 44-54);

wherein the plurality of onward data streams **correspond** substantially to the content (column 8, line 65-column 9, line 3 and column 34, lines 32-59) and where each of the plurality of onward data streams are **offset** in time by the multicast server with respect to a preceding one of said plurality of onward data streams by an offset value (column 34, lines 31-39) indicated in the control data (schedule indicating staggered

start times; column 8, lines 31-43 and column 34, lines 31-39 and lines 47-59), he fails to specifically disclose communicating content in response to requests for the content and wherein the data streams are offset by a single value.

In an analogous art, Hodge discloses a video distribution system (Fig. 2; column 3, lines 21-51) wherein a super hub controller (13) will determine when content is to be distributed in response to requests for the content (requests by motion picture studios as to how and when the content is to be distributed; column 4, line 64-column 5, line 11) for the typical benefit of ensuring maximum revenue distribution from broadcast video programs (column 3, lines 40-51).

Additionally, in an analogous art, Banker discloses a broadcast television system (Fig. 1) for providing NVOD services (column 2, lines 40-68) wherein a plurality of data streams consisting of the same program are transmitted continuously and sequentially (column 11, lines 23-42, Fig. 6A, 8 and 9) with each data stream offset with respect to a preceding one of said plurality of onward data streams by a single offset value (such as 15 minutes; see Fig. 6A, 8 and 9; column 11, lines 23-42) for the typical benefit of providing a clear and consistent indication of the wait required for a user to start viewing the movie (column 11, lines 23-42 and Fig. 6A).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hendrick's system to include communicating content in response to requests for the content, as taught by Hodge, for the typical benefit of ensuring maximum revenue distribution from broadcast video programs.

Additionally, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hendrick's and Hodge's system to include wherein the data streams are offset by a single value, as taught by Banker, for the typical benefit of providing a clear and consistent indication of the wait required for a user to start viewing the movie.

As to claims 14, 18 and 22, while Hendricks discloses a programmed computer (network manager, 214) for streaming data (Fig. 1) between a content providing server (operations center, 202) and a plurality of client terminator units (set top terminals, 220), comprising memory having at least one region for storing computer executable program code (Fig. 3; column 11, lines 14-29) and

a processor for executing the program code stored in memory (column 11, lines 21-29), wherein the program code includes:

code to receive control data (column 8, lines 31-44) from the content providing server (column 8, lines 8-30 and 44-54),

code to receive at least part of an incoming data stream corresponding to content (program package signals; column 8, lines 8-30 and 44-54) from the content providing server (column 8, lines 8-30 and 44-54),

code to generate, in response to the received control data and incoming data stream received or being received (in response to receiving the program from the operations center; column 8, lines 8-30 and 44-54) a plurality of onward data streams (staggered streams of a single received program; column 34, lines 32-59), and

code to transmit the plurality of onward data streams (column 34, lines 32-59) to the plurality of client terminator units, respectively (transmitted to the subscribers who will receive the program at that start time; column 34, lines 39-59),

wherein the plurality of onward data streams **correspond** substantially to the content (column 8, line 65-column 9, line 3 and column 34, lines 32-59) and wherein each of said plurality of onward data stream is **offset** in time with respect to a preceding one of said plurality of onward data streams by an offset value (column 34, lines 31-39) indicated in the control data (schedule indicating staggered start times; column 8, lines 31-43 and column 34, lines 31-39 and lines 47-59), he fails to specifically disclose communicating content in response to requests for the content and wherein the data streams are offset by a single value.

In an analogous art, Hodge discloses a video distribution system (Fig. 2; column 3, lines 21-51) wherein a super hub controller (13) will determine when content is to be distributed in response to requests for the content (requests by motion picture studios as to how and when the content is to be distributed; column 4, line 64-column 5, line 11) for the typical benefit of ensuring maximum revenue distribution from broadcast video programs (column 3, lines 40-51).

Additionally, in an analogous art, Banker discloses a broadcast television system (Fig. 1) for providing NVOD services (column 2, lines 40-68) wherein a plurality of data streams consisting of the same program are transmitted continuously and sequentially (column 11, lines 23-42, Fig. 6A, 8 and 9) with each data stream offset with respect to a preceding one of said plurality of onward data streams by a single offset value (such as

15 minutes; see Fig. 6A, 8 and 9; column 11, lines 23-42) for the typical benefit of providing a clear and consistent indication of the wait required for a user to start viewing the movie (column 11, lines 23-42 and Fig. 6A).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hendrick's system to include communicating content in response to requests for the content, as taught by Hodge, for the typical benefit of ensuring maximum revenue distribution from broadcast video programs.

Additionally, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hendrick's and Hodge's system to include wherein the data streams are offset by a single value, as taught by Banker, for the typical benefit of providing a clear and consistent indication of the wait required for a user to start viewing the movie.

As to claim 3, Hendricks, Hodge and Banker disclose wherein the offset value is provided by the content providing server (wherein Operations center indicates the start times of the program streams; see Hendricks at column 8, lines 31-44 and column 34, lines 32-39).

As to claims 4, 13, 17, 21 and 25, Hendricks, Hodge and Banker disclose arranging to loop a first one of the plurality of onward data stream at least once (see Banker at column 11, lines 23-42 and Fig. 9).

Claims 2, 11, 15, 19 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks, Hodge and Banker as applied to claims 1, 10, 14, 18 and 22 above, and further in view of DeBey (5,701,582).

As to claims 2, 11, 15, 19 and 23, while Hendricks, Hodge and Banker disclose the generating of first and second onward data streams, they fail to specifically disclose wherein data streams are generated prior to receipt of all of the incoming data stream.

DeBey discloses the transmission of digital programming streams (column 14, lines 22-36), received at A/V digitizing units, (72 in Fig. 7A, column 13 lines 64-67 and column 14, lines 1-21), which are generated prior to receipt of all of an incoming data stream (column 14, lines 22-36), for the typical advantage of transmitting live television feeds to viewers as they are received.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hendricks, Hodge and Banker's system to include wherein data streams are generated prior to receipt of all of the incoming data stream, as taught by DeBey, for the typical advantage of transmitting live television feeds to viewers as they are received.

Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks in view of Hodge, Banker and Fluss (6,304,578).

As to claim 5, while Hendricks discloses a multicast server for streaming data (Headend, 208), comprising a processor unit (column 11, lines 21-29) coupled to a storage device (file server, 215),

the processor unit being arranged to receive control data (column 8, lines 31-44) and an incoming data stream corresponding to content (program package signals; column 8, lines 8-30 and 44-54), the incoming data stream being received from a content providing server (operations center, 202; column 8, lines 8-54) and being arranged to store the content in the storage device (column 9, line 51-column 10, line 6),

wherein the processor unit is further arranged to generate a plurality of onward data streams (staggered streams of a single program; column 34, lines 32-59) for transmission to a plurality of client terminator units, respectively (transmitted to the subscriber set top terminals, 220 who will receive the program at that start time; column 34, lines 39-59), in response to the control data (column 8, lines 31-44) and incoming data stream (program package signals; column 8, lines 8-30 and 44-54),

wherein the plurality of onward data streams correspond substantially to the content (column 8, line 65-column 9, line 3 and column 34, lines 32-59) and wherein each of the plurality of onward data streams are **offset** in time by the multicast server with respect to a preceding one of said plurality of onward data streams by an offset value (column 34, lines 31-39) indicated in the control data (schedule indicating staggered start times; column 8, lines 31-43 and column 34, lines 31-39 and lines 47-59), he fails to specifically disclose communicating content in response to requests for the content, a router coupled to the processor and wherein the data streams are offset by a single value.

In an analogous art, Hodge discloses a video distribution system (Fig. 2; column 3, lines 21-51) wherein a super hub controller (13) will determine when content is to be distributed in response to requests for the content (requests by motion picture studios as to how and when the content is to be distributed; column 4, line 64-column 5, line 11) for the typical benefit of ensuring maximum revenue distribution from broadcast video programs (column 3, lines 40-51).

Additionally, in an analogous art, Fluss discloses a video distribution system (Fig. 1) wherein a cable head end (103) will include a router (105; column 4, lines 32-39) for the typical benefit of routing data packets to the appropriate users (column 4, lines 16-20).

Also, in an analogous art, Banker discloses a broadcast television system (Fig. 1) for providing NVOD services (column 2, lines 40-68) wherein a plurality of data streams consisting of the same program are transmitted continuously and sequentially (column 11, lines 23-42, Fig. 6A, 8 and 9) with each data stream offset with respect to a preceding one of said plurality of onward data streams by a single offset value (such as 15 minutes; see Fig. 6A, 8 and 9; column 11, lines 23-42) for the typical benefit of providing a clear and consistent indication of the wait required for a user to start viewing the movie (column 11, lines 23-42 and Fig. 6A).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hendrick's system to include communicating content in response to requests for the content, as taught by Hodge, for the typical benefit of ensuring maximum revenue distribution from broadcast video programs.

Additionally, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hendricks' system to include a router, as taught by Fluss, for the typical benefit of ensuring that data packets to be transmitted are correctly routed to the appropriate users.

Also, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hendrick's and Hodge's system to include wherein the data streams are offset by a single value, as taught by Banker, for the typical benefit of providing a clear and consistent indication of the wait required for a user to start viewing the movie.

As to claim 6, Hendricks, Hodge and Fluss disclose wherein the router is arranged to transmit the plurality of onward data streams to the plurality of client terminator units, respectively (wherein the router transmits each data packet to the respective user; see Fluss at column 4, lines 34-45).

As to claim 9, Hendricks, Hodge, Fluss and Banker disclose arranging to loop a first one of the plurality of onward data stream at least once (see Banker at column 11, lines 23-42 and Fig. 9).

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks, Hodge, Fluss and Banker as applied to claim 5 above, and further in view of DeBey.

As to claim 5, while Hendricks, Hodge, Fluss and Banker disclose the generating of first and second onward data streams, they fail to specifically disclose wherein data streams are generated prior to receipt of all of the incoming data stream.

DeBey discloses the transmission of digital programming streams (column 14, lines 22-36), received at A/V digitizing units, (72 in Fig. 7A, column 13 lines 64-67 and column 14, lines 1-21), which are generated prior to receipt of all of an incoming data stream (column 14, lines 22-36), for the typical advantage of transmitting live television feeds to viewers as they are received.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hendricks, Hodge, Fluss and Banker's system to include wherein data streams are generated prior to receipt of all of the incoming data stream, as taught by DeBey, for the typical advantage of transmitting live television feeds to viewers as they are received.

(10) Response to Argument

(a) On page 10, of appellant's brief, appellant argues that in Hendricks there is no mechanism for the distribution server *as required by the claimed invention* to effect any timing offsets, as the start times are determined by the operations center.

In response, it is noted that the claims require the distribution server "generate a plurality of onward data streams and transmit the plurality of onward data streams to the plurality of client terminal units."

Hendricks clearly discloses wherein a distribution server (local headend, 208, distributing the content to subscribers; column 8, lines 55-64) will generate a plurality of onward data streams and transmit the plurality of onward data streams (time staggered NVOD programming; column 34, lines 30-59) to the plurality of client terminal units (STT, 220; Fig. 1).

The claim further recites that “the distribution server offsets in time each of the plurality of onward data streams...by a single offset value indicated in the control data". More specifically, it is noted that the claims only require that the control data ***indicate*** the offset value.

In this case, Hendricks clearly discloses wherein the distribution server (local headend, 208) will offset each of the plurality of onward data streams by an offset value ***indicated*** in the control data (generating time offset video streams according to the received schedule; column 34, lines 30-59 and column 8, lines 30-43).

The offset values are clearly ***indicated*** in the control data, as the operations center transmits a broadcast schedule including start times (column 8, lines 30-44). The multiple start times (for example, 8:00 and 8:15) clearly provide an *indication* of the offset between them (in this case, 15 minutes).

As indicated in the rejection, Hendricks does not specifically disclose wherein the plurality of streams are all offset from preceding streams by a single value.

Banker was then relied upon to disclose that it was known in the art for an NVOD system wherein the plurality of data streams are all offset from one another by the same single value (see Banker at Fig. 9 and column 11, lines 23-42).

Thus, the combination of Banker with Hendricks would provide for the transmission of a broadcast schedule from the operations center, indicating start times, and thus offset values, for NVOD programs (as taught by Hendricks), which are all specifically offset by the same single value (as taught by Banker).

(b) On page 11, of appellant's brief, appellant argues that applying a single timing offset to programs within a package, or method (i), would corrupt the start times for such programs and would not be seriously contemplated as an option.

In response, it is again noted that the claims merely require an ***indication*** of a single offset value.

As previously shown, Hendricks clearly indicates offset values, by transmitting start times (column 8, lines 30-43) which are offset by some defined value (column 34, lines 30-59). Hendricks merely fails to explicitly disclose the plurality of streams are offset by a *single* value. More specifically, this means that the start times of the plurality of streams could consist of: 8:00, 8:10, 8:30, etc, wherein there exists

Banker discloses an NVOD system wherein the plurality of streams are all offset by a single offset value (15 minutes; see Banker at Fig. 9 and column 11, lines 23-43).

Thus, in combination with Hendricks, this would merely provide a plurality of start times which are all offset by a single offset value.

For example, using the 15 minute offset shown by Banker, the start times would then all be in 15 minute intervals, such as 8:00, 8:15, 8:30, etc. This combination would clearly not "corrupt the start times for such programs" as it would merely require a

specific selection of start times. In this case, the operations center dictates the start times which are to be used for particular programs. The combination with Hendricks would simply provide for the program schedule to offset all of the streams by a single value, such as 15 minutes, which was clearly known in the art and would provide users with more user friendly system as all of the programs would be scheduled for predictable intervals.

As the clams merely require an ***indication*** of a single offset value, simply selecting start times which are offset by the same value, as taught by the proposed combination of Hendricks and Banker would clearly meet the claim language.

Furthermore, although not specifically required by the current claim language, it is noted that providing a single offset value, as opposed to an ***indication*** of a single offset value, would clearly have been obvious to one of ordinary skill within the art at the time. Hendricks discloses providing start times for NVOD programming and Banker clearly discloses providing a single offset value for offsetting NVOD programming. One of ordinary skill in the art would have been capable of modifying Hendricks to include a single offset value, as it would have merely required the simple substitution of one known element for another to obtain predictable results, as the variation would have been predictable to one of ordinary skill in the art. In this case, one would simply be replacing the explicit start time listings of Hendricks, such as by indicating times: 8:00, 8:15, 8:30, which an indication of a single offset value, such as 15 minutes. In both

cases, the data is merely utilized by the receiving computer server to determine when to initiate transmission the program streams.

(c) In response to appellant's arguments on page 12, regarding the operations center determining the start times for NVOD programs, Hendricks specifically discloses wherein the operations center performs the scheduling decisions, which includes preparing program packages for transmission and including the start times of the individual programs in the signal transmitted to the local headend (column 8, lines 7-54).

(d) In response to appellant's arguments on page 12, regarding the application of an offset value to the start times of Hendricks, see (b) above, Where it is clearly shown that the combination would not result in the "corruption" of the start times, as the modification would merely result in the operations center selecting specific start times which are offset by a single common value.

(e) On page 13, appellant argues that if one uses Banker's single offset value, there would be no purpose in the Operations Center performing one of its primary functions.

In response, as indicated in (b) above, the modification of Hendricks to meet the claim limitations of ***indicating*** a single offset value would merely alter the method by which the operation center selects and transmits the start times. The operations center

would continue to schedule the programming and select start times, as normal, but would simply ensure that the start times are all offset by a single value.

Furthermore, as previously indicated, Hendricks could clearly be modified to include transmitting control data including a single offset value (such as used by Banker), as this would merely be an obvious variation of Hendrick's current schedule. Instead of transmitting a plurality of separate start times, the system would merely transmit a start time and offset value. Thus, 8:00, 8:15 and 8:30, could simply be represented by 8:00 and a 15 minute offset.

The functionality of the operations center would be unchanged, as the modification is merely to the format of the control signal being sent to the local headend.

(f) In response to appellant's arguments on pages 14-15, please see (a) –(e) above.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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